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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,253	09/01/2000	Cynthia L. Recker	SC11244ZC	5727
23125	7590	11/17/2004	EXAMINER	
FREESCALE SEMICONDUCTOR, INC. LAW DEPARTMENT 7700 WEST PARMER LANE MD:TX32/PL02 AUSTIN, TX 78729			DAY, HERNG DER	
			ART UNIT	PAPER NUMBER
			2128	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/654,253

Applicant(s)

RECKER ET AL.

Examiner

Herng-der Day

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ^o | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to Applicants' Reply ("Reply") to Office Action dated February 26, 2004, faxed July 26, 2004.

1-1. Claims 1, 5, 10, 11, and 14 have been amended. Claims 1-20 are pending.

1-2. Claims 1-20 have been examined and rejected.

Specification

2. The disclosure is objected to because of the following informalities:

Appropriate correction is required.

2-1. As described in lines 18-19 of page 18, "Referring to FIG. 5, a differential pair scenario assumes a particular circuit". However, as described in lines 20-21 of page 2, "FIG. 5 is a mismatch results output frame of the interface shown in FIG. 2 for a current mirror scenario".

3. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

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3-1. The attempt to incorporate essential material into this application by reference to P. Drennan and C. McAndrew, "A Comprehensive MOSFET Mismatch Model", IEEE ICMTS, 1999 (Page 3, lines 21-22) and P. Drennan, "Integrated Circuit Device Mismatch Modeling and Characterization for Analog Circuit Design", ph.D. Dissertation, Arizona State University, May 1999 (Page 4, lines 3-4), is improper because neither of them is (1) a U.S. patent, (2) a U.S. patent application publication, or (3) a pending U.S. application.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

5-1. Claims 1 and 10 recite the limitation "mismatch model" in line 2 of each claim.

However, as described in the specification at page 3, lines 18-19, the mismatch model has been shown as a formula without defining all of the symbols listed in the formula, for example, P_j .

Therefore, without undue experimentation, it is unclear for one skilled in the art how to comprise a meaningful mismatch model.

5-2. Claims not specifically rejected above are rejected as being dependent on a rejected claim.

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6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 4-19 and 12-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7-1. Claims 4 and 12 recite the limitation “a current driven scenario” in each claim. It is vague and indefinite about the “current driven scenario” because only “current mirror scenario” has been disclosed in the specification. For the purpose of claim examination, the Examiner will interpret “a current driven scenario” as described in claims 4 and 12 as “a current mirror scenario”.

7-2. Claims not specifically rejected above are rejected as being dependent on a rejected claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-6 and 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U.S. Patent 6,560,755 B1 issued May 6, 2003, and filed August 24, 2000, in view of Applicants' admission.

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9-1. Regarding claims 1-6 and 8-20, Zhang et al. disclose a mismatch modeling tool comprising:

a software implemented transistor mismatch model ("SITMM") (mismatch extraction module 204, column 6, lines 54-63, and FIG. 2);

at least one editable mismatch model data library comprising process parameter variables accessed by said SITMM (mismatch model parameters, column 6, lines 37-42);

a circuit simulation library and program data output accessed by said SITMM (original model, column 6, lines 54-63, and FIG. 2); and

a graphical interface to said SITMM (input interface 202, column 6, lines 54-63, and FIG. 2).

Zhang et al. fail to expressly disclose the format used in the input interface for different scenarios. Nevertheless, Zhang et al. have disclosed different interface for input data and output results.

Applicants have admitted at page 5, lines 8-10, "The mismatch tool 10 further comprises the data input and data output interfaces that may be comprised of any data interface method or system". Also, at pages 8-9, Applicants have admitted programming changes for added new technologies, for example, make the technology available on the pull down menus, may be accomplished in a variety of methods by those skilled in the art. Furthermore, at page 7, lines 7-9, Applicants have admitted, "The five scenarios above are presented as examples of scenarios popular with those skilled in the art".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Zhang et al. to incorporate the admission of Applicants to

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obtain the invention as specified in claims 1-6 and 8-20 because using graphical interface to facilitate data input and output for different applications or scenarios is considered to be well known for those skilled in the relevant art.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Zhang et al., U.S. Patent 6,560,755 B1 issued May 6, 2003, and filed August 24, 2000, and Applicants' admission in view of Hussey, U.S. Patent 5,826,269 issued October 20, 1998.

10-1. Regarding claims 7, Zhang et al. fail to expressly disclose the output data file is an emailed ASCII output data file.

Hussey discloses an electronic mail interface that provides an efficient networked system that processes user requests submitted to a network server, the results of which are typically viewed at a later time in order to facilitate task scheduling by the server of user requests from connected client computers in a network, and thereby reduce the incidence of system bottlenecks that may rise with a server (column 3, lines 29 through column 4, line 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined teachings of Zhang et al. and Applicants' admission to incorporate the teachings of Hussey to obtain the invention as specified in claim 7 because it will facilitate task scheduling and thereby reduce the incidence of system bottlenecks.

Applicants' Arguments

11. Applicants argue the following:

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11-1. (1) "Applicant points out that these publications were referenced to illustrate the state of the art at the time the application was tiled" (page 8, paragraph 2, Reply).

11-2. (2) "Applicant points out that consistent with Drennan et al., the term, P_j , is a variable referring to a physical process parameter" (page 9, paragraph 1, Reply).

11-3. (3) "neither Drennan et al. (nor the other references for that matter) disclose even a need or desire to enable a user to generate mismatch results based on different combinations of user-definable, input parameter data. Moreover, they certainly do not provide a mismatch model tool with a convenient interface for implementing the same" (page 12, paragraph 2, Reply).

Response to Arguments

12. Applicants' arguments have been fully considered.

12-1. Applicants' arguments (1)-(2) are not persuasive. The publications provide essential material because the mismatch model has been shown as a formula in the specification without defining all of the symbols listed in the formula, for example, P_j .

12-2. Applicants' argument (3) is moot in view of the new ground(s) of rejection.

Conclusion

13. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Herng-der Day whose telephone number is (571) 272-3777. The Examiner can normally be reached on 9:00 - 17:30.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jean Homere can be reached on (571) 272-3780. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Herng-der Day *HD*
November 15, 2004

Thaiphon
Thai Phan
Patent Examiner
AU: 2128